JOINT APPLICATION FOR PERMITS

U.S. ARMY CORPS OF ENGINEERS - IDAHO DEPARTMENT OF WATER RESOURCES - IDAHO DEPARTMENT OF LANDS

Authorities: The Department of Army Corps of Engineers (Corps), Idaho Department of Water Resources (IDWR), and Idaho Department of Lands (IDL) established a joint process for activities impacting jurisdictional waterways that require review and/or approval of both the Corps and State of Idaho. Department of Army permits are required by Section 10 of the Rivers & Harbors Act of 1899 for any structure(s) or work in or affecting navigable waters of the United States and by Section 404 of the Clean Water Act for the discharge of dredged or fill materials into waters of the United States, including adjacent wetlands. State permits are required under the State of Idaho, Stream Protection Act (Title 42, Chapter 38, Idaho Code and Lake Protection Act (Section 58, Chapter 13 et seq., Idaho Code). In addition the information will be used to determine compliance with Section 401 of the Clean Water Act by the appropriate State, Tribal or Federal entity.

Joint Application: Information provided on this application will be used in evaluating the proposed activities. Disclosure of requested information is voluntary. Failure to supply the requested information may delay processing and issuance of the appropriate permit or authorization. Applicant will need to send a completed application, along with one (1) set of legible, black and white (8½"x11"), reproducible drawings that illustrate the location and character of the proposed project / activities to both the Corps and the State of Idaho.

See Instruction Guide for assistance with Application. Accurate submission of requested information can prevent delays in reviewing and permitting your application. Drawings including vicinity maps, plan-view and section-view drawings must be submitted on 8-1/2 x 11 papers.

Do not start work until you have received all required permits from both the Corps and the State of Idaho

FOR AGENCY USE ONLY

USACE NWW-	Date Received:	☐ Incomplete Application Returned	Date Returned:
Idaho Department of Water Resources No.	Date Received:	☐ Fee Received DATE:	Receipt No.:
Idaho Department of Lands No.	Date Received:	☐ Fee Received DATE:	Receipt No.:

INCOMPLETE APPLICANTS MAY NOT BE PROCESSED

1. CONTACT INFORMATION - APPLICANT Required:			2. CONTACT INFORMATION - AGENT:		
Name: Monty Johnson			Name: Jeremy Aulbach		
Company: J.R. Simplot Company			Company: Pharmer Engineering		
Mailing Address: P.O. Box 912			Mailing Address: 1998 W. Judith Lane		
City: Pocatello	State: ID	Zip Code: 83204	City: Boise	State: ID	Zip Code: 83705
Phone Number *(include area code)*: 208-235-5674	E-mail: monty.johnson@simplot.com		Phone Number *(include area code)*: 208-433-1900	E-mail: jaulbach@pharmereng.com	

3. PROJECT NAME or TITLE: Smoky Canyon Selenium Pilot Treatment System			4. PROJECT STREET ADDRESS: 1890 Smoky Canyon Rd	
5. PROJECT COUNTY: Caribou	6. PROJECT CITY: Smoky Canyon Mine		7. PROJECT ZIP CODE: 83110	8. NEAREST WATERWAY/WATERBODY: Hoopes Spring (stream channel)
9. TAX PARCEL ID#:	10. LATITUDE: N 42.643730 LONGITUDE: W 111.113653	11a. 1/4:	11b. 1/4: 11c. SECTION: 18	11d. TOWNSHIP: 9S 11e. RANGE: 46E
12a. ESTIMATED START DATE: July 1, 2014	12b. ESTIMATED END DATE: October 1, 2014	13a. IS PROJECT LOCATED WITHIN ESTABLISHED TRIBAL RESERVATION BOUNDARIES? ☒ NO ☐ YES Tribe:		
13b. IS PROJECT LOCATED IN LISTED ESA AREA? ☐ NO ☒ YES		13c. IS PROJECT LOCATED ON/NEAR HISTORICAL SITE? ☒ NO ☐ YES		

14. DIRECTIONS TO PROJECT SITE: Include vicinity map with legible crossroads, street numbers, names, landmarks.

From Fairview, WY Head west on County Road 143, 0.9 miles, take left (south) on County Road 141/Crow Creek Road, 7.8 miles, turn right on Caribou NF Road 179, 1.4 miles, turn right (north) on unnamed road, 0.8 miles, arrive at destination.

15. PURPOSE and NEED: ☐ Commercial ☒ Industrial ☐ Public ☐ Private ☐ Other

Describe the reason or purpose of your project; include a brief description of the overall project. Continue to Block 16 to detail each work activity and overall project.

To evaluate the water treatment efficiency of a fluidized bed reactor treatment system for the removal of selenium from Hoopes Spring and South Fork Sage Creek springs (north). Project will also evaluate the ability of add on treatment systems necessary to meet water quality standards of all treated water for a number of analytes. Project will also evaluate chemical consumption and sludge generation of treatment system prior to full scale implementation.

16. DETAILED DESCRIPTION OF EACH ACTIVITY WITHIN OVERALL PROJECT. Specifically indicate portions that take place within waters of the United States, including wetlands: Include dimensions; equipment, construction, methods; erosion, sediment and turbidity controls; hydrological changes: general stream/surface water flows, estimated winter/summer flows; borrow sources, disposal locations etc.:

Activities List
1) Hoopes Spring intake structure at HS sample location (Within stream channel)
2) Hoopes Spring intake structure at HS-C1 sample location (Within stream channel)
3) Hoopes Spring gravity line (Within stream channel and adjacent to stream channel)
4) Hoopes Spring overflow line and channel (Adjacent to stream channel)
5) Hoopes Spring pump station (Adjacent to stream channel
6) SF Sage Creek springs (north) intake structure (Adjacent to stream channel)
7) SF Sage Creek springs (north) gravity line (Adjacent to stream channel)
8) SF Sage Creek springs (north) overflow line and channel (Adjacent to stream channel)
9) SF Sage Creek springs (north) pump station (Adjacent to stream channel)
10) Treatability study pilot system building construction
11) Treatability study pilot system outfall

Attached photos and design drawings for each activity included with application

17. DESCRIBE ALTERNATIVES CONSIDERED to AVOID or MEASURES TAKEN to MINIMIZE and/ or COMPENSATE for IMPACTS to WATERS of the UNITED STATES, INCLUDING WETLANDS: See Instruction Guide for specific details.

The Hoopes Spring gravity collection line was evaluated for above ground installation and for below ground installation. The alternative of above ground installation was chosen to minimize stream bed disturbance within Hoopes Spring Creek. The pump stations for both Hoopes Spring and SF Sage Creek springs (north) are located adjacent to the stream channels above the apparent wetland elevations to minimize the disturbance to wetlands. Collection of the Hoopes Spring waters at the HS and HS-C1 locations allows for the largest flows to be captured with the fewest dike installations and to collect the waters containing the highest selenium concentrations. A gravel cover is planned within the diked and impounded areas to mitigate animal disturbance within the area which would result in increased erosion and sediment load entering in the springs. Collection of SF Sage Creek springs (north)waters above the stream bed elevation eliminates the need to work within the stream channel. The treatment building was located away from wetland areas and provides adequate setback from the stream channel to allow for silt fence installation to protect from silt and storm water intrusion. The outfall from the treatment building will be a constructed channel with gravel and rip rap ending at the stream edge. This outfall type will eliminate the need for in-stream construction.

18. PROPOSED MITIGATION STATEMENT or PLAN: If you believe a mitigation plan is not needed, provide a statement and your reasoning why a mitigation plan is NOT required. Or, attach a copy of your proposed mitigation plan.

No mitigation plan is proposed due to the small area of disturbance within wetland and stream channel

19. TYPE and QUANTITY of MATERIAL(S) to be discharged below the ordinary high water mark and/or wetlands:

Dirt or Topsoil:	_____	cubic yards
Dredged Material:	_____	cubic yards
Clean Sand:	_____	cubic yards
Clay:	29.4	cubic yards
Gravel, Rock, or Stone:	20	cubic yards
Concrete:	5	cubic yards
Other (describe): _____ :	_____	cubic yards
Other (describe: _____ :	_____	cubic yards
TOTAL:	54.4	cubic yards

20. TYPE and QUANTITY of impacts to waters of the United States, including wetlands:

Filling:	_____ acres	3,660 sq ft.	_____	cubic yards
Backfill & Bedding:	_____ acres	_____ sq ft.	_____	cubic yards
Land Clearing:	_____ acres	_____ sq ft.	_____	cubic yards
Dredging:	_____ acres	_____ sq ft.	_____	cubic yards
Flooding:	_____ acres	_____ sq ft.	_____	cubic yards
Excavation:	_____ acres	_____ sq ft.	_____	cubic yards
Draining:	0 acres	_____ sq ft.	_____	cubic yards
Other: _____ :	_____ acres	_____ sq ft.	_____	cubic yards
TOTALS:	0 acres	3,660 sq ft.	_____	cubic yards

21. HAVE ANY WORK ACTIVITIES STARTED ON THIS PROJECT? ☐ NO ☒ YES If yes, describe ALL work that has occurred including dates.

The intake structure at SF Sage was constructed as a part of a previous pilot treatment system (2009).

22. LIST ALL PREVIOUSLY ISSUED PERMIT AUTHORIZATIONS:

23. ☐ YES, Alteration(s) are located on Public Trust Lands, Administered by Idaho Department of Lands

24. SIZE AND FLOW CAPACITY OF BRIDGE/CULVERT and DRAINAGE AREA SERVED: _____ Square Miles

25. IS PROJECT LOCATED IN A MAPPED FLOODWAY? ☒ NO ☐ YES If yes, contact the floodplain administrator in the local government jsrisdiction in which the project is located. A Floodplain Development permit and a No-rise Certification may be required.

26a WATER QUALITY CERTIFICATION: Pursuant to the Clean Water Act, anyone who wishes to discharge dredge or fill material into the waters of the United States, either on private or public property, must obtain a Section 401 Water Quality Certification (WQC) from the appropriate water quality certifying government entity.
See Instruction Guide for further clarification and all contact information.

The following information is requested by IDEQ and/or EPA concerning the proposed impacts to water quality and anti-degradation:

☐ NO ☒ YES Is applicant willing to assume that the affected waterbody is high quality?
☐ NO ☒ YES Does applicant have water quality data relevant to determining whether the affected waterbody is high quality or not?
☐ NO ☒ YES Is the applicant willing to collect the data needed to determine whether the affected waterbody is high quality or not?

26b. BEST MANAGEMENT PRACTICTES (BMP's): List the Best Management Practices and describe these practices that you will use to minimize impacts on water quality and anti-degradation of water quality. All feasible alternatives should be considered - treatment or otherwise. Select an alternative which will minimize degrading water quality

The BMP's to be implemented as a part of this project include standard SWPPP practices when constructing outside of the stream channel. The treatment plant construction area will include a silt fence as well as a settling pond for all storm water runoff. The construction within stream channels will be restricted to the smallest disturbance possible. All spoil material will be stored above the high water line during excavations. The dike and gravel areas around HS and HS-C1 will be constructed with all materials stockpiled outside of wetland areas. No fuel or lubricant storage within 50' of wetlands will occur and all refueling of equipment will occur outside of these areas as well. The HDPE gravity collection piping will be fused outside of the stream channel and will be slid into place within the stream channel to minimize the amount of construction time and equipment within the stream channel.

Through the 401 Certification process, water quality certification will stipulate minimum management practices needed to prevent degradation.

27. LIST EACH IMPACT to stream, river, lake, reservoir, including shoreline: Attach site map with each impact location.

Activity	Name of Water Body	Intermittent Perennial	Description of Impact and Dimensions	Impact Length Linear Feet
Hoope Spring Intakes	Hoopes Spring	Perennial	Install dike and gravel fill at headwater of Hoopes Spring	160
Hoopes Spring overflow	Hoopes Spring	Perennial	Install gravel and rip rap channel to stream edge for discharge	10
SF Sage Intake	SF Sage	Perennial	Install lower portion of intake with 6" perforated pipe bedded in	90
Treatment building outfall	Hoopes Spring	Perennial	Install gravel and rip rap channel to stream edge for discharge	10
			TOTAL STREAM IMPACTS (Linear Feet):	270

28. LIST EACH WETLAND IMPACT include mechanized clearing, filL excavation, flood, drainage, etc. Attach site map with each impact location.

Activity	Wetland Type: Emergent, Forested, Scrub/Shrub	Distance to Water Body (linear ft)	Description of Impact Purpose: road crossing, compound, culvert, etc.	Impact Length (acres, square ft linear ft
Hoopes Spring Intake	Emergent	0	Fill area at spring headwaters to eliminate erosion impacts from	3,660
Hoopes Spring Overflow	Emergent	0	Construct gravel and rip rap channel for overflow return	20
SF Sage Cr spr (N) Overflow	Emergent	0	Construct gravel and rip rap channel for overflow return	20
Treatment Building outfall	Emergent	0	Construct gravel and rip rap channel for overflow return.	20
			TOTAL WETLAND IMPACTS (Square Feet):	3,720

29. ADJACENT PROPERTY OWNERS NOTIFICATION REQUIREM: Provide contact information of ALL adjacent property owners below.

Name: Mailing Address: City: State: Zip Code: Phone Number *(include area code)*: E-mail:	Name: Mailing Address: City: State: Zip Code: Phone Number *(include area code)*: E-mail:
Name: Mailing Address: City: State: Zip Code: Phone Number *(include area code)*: E-mail:	Name: Mailing Address: City: State: Zip Code: Phone Number *(include area code)*: E-mail:
Name: Mailing Address: City: State: Zip Code: Phone Number *(include area code)*: E-mail:	Name: Mailing Address: City: State: Zip Code: Phone Number *(include area code)*: E-mail:
Name: Mailing Address: City: State: Zip Code: Phone Number *(include area code)*: E-mail:	Name: Mailing Address: City: State: Zip Code: Phone Number *(include area code)*: E-mail:

30. SIGNATURES: STATEMENT OF AUTHORIAZATION / CERTIFICATION OF AGENT / ACCESS

Application is hereby made for permit, or permits, to authorize the work described in this application and all supporting documentation. I certify that the information in this application is complete and accurate. I further certify that I possess the authority to undertake the work described herein; or am acting as the duly authorized agent of the applicant (Block 2). I hereby grant the agencies to which this application is made, the right to access/come upon the above-described location(s) to inspect the proposed and completed work/activities.

Signature of Applicant: ______________________________ *Date:* ______________

Signature of Agent: ______________________________ *Date:* ______________

This application must be signed by the person who desires to undertake the proposed activity AND signed by a duly authorized agent (see Block 1, 2, 30). Further, 18 USC Section 1001 provides that: "*Whoever, in any manner within the jurisdiction of any department of the United States knowingly and willfully falsifies, conceals, or covers up any trick, scheme, or disguises a material fact or makes any false, fictitious, or fraudulent statements or representations or makes or uses any false writing or document knowing same to contain any false, fictitious or fraudulent statements or entry, shall be fined not more than $10,000 or imprisoned not more than five years or both*".

Memo

PHARMER ENGINEERING

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Fax (208) 433-1901
www.pharmereng.com

To: Monty Johnson, JR Simplot Company

CC: Henry Hamanishi, Andy Koulermos

From: Jeremy Aulbach

Date: June 17, 2014

Re: ACE 404 permit application – Description of each Activity within overall project

1) Hoopes Spring intake structure at HS sample location (Within stream channel)
Drawings HS-00100-A and HS-00400-C

The Hoopes Spring intake structure at the HS sample location is within the stream channel and occupies a portion of land assumed to be wetlands. The intake structure includes a gravel fill portion of the springs to prevent erosion and sediment disturbance by animals as well as preventing ice intrusion into the intake. The intake structure also includes a dike constructed of a clay core and rip rap surface. The dike width is ~12ft and 3.5ft in height with 2:1 slope on the face and 3:1 slope on the tail with a 5' top width. A 16" pipe penetrates the dike and is attached to an overflow structure which will allow water to bypass the dike when downstream valves are closed. A 16" HDPE pipe is attached to the outlet of the bypass structure which the Hoopes Spring gravity line is shown in the drawings.

2) Hoopes Spring intake structure at HS-C1 sample location (Within stream channel)
Drawings HS-00100-A and HS-00400-C

The Hoopes Spring intake structure at the HS-C1 sample location is within the stream channel and occupies a portion of land assumed to be wetlands. The intake structure includes a gravel fill portion of the springs to prevent erosion and sediment disturbance by animals as well as preventing ice intrusion into the intake. The intake structure also includes a dike constructed of a clay core and rip rap surface. The dike width is ~20ft and 3.0ft in height. A 12" pipe penetrates the dike and is attached to an overflow structure which will allow water to bypass the dike when downstream valves are closed. A 12" HDPE pipe is attached to the outlet of the bypass structure which the Hoopes Spring gravity line is shown in the drawings.

3) Hoopes Spring gravity line (Within stream channel and adjacent to stream channel)
Drawing HS-00100-A

The Hoopes Spring gravity line includes the 16" HDPE line from the HS dike intake and the 12" HDPE line from the HS-C1 dike intake. The gravity line is laid within the stream bed to minimize

excavation disturbance from the intake structures to the Hoopes Spring pump station. Steep embankments to the west of the channel prevent lines from being excavated adjacent to the stream bed. Wetlands and braided channel extend to the east of the stream channel which would require large disturbance of wetland and stream channels to allow for below ground installation. Concrete anchor blocks will be installed at three locations within the stream channel to prevent the piping from being pull out due to ice accumulation.

4) Hoopes Spring overflow line and channel (Adjacent to stream channel)
Drawing HS-00100-A

The overflow line from the Hoopes Spring pump station will allow all water delivered to the pump station which is not pumped to the treatment system to be returned to the stream. The overflow line is a 20" HPDE pipe connected to the pump station wetwell. The pipe is located 1' below natural ground and extends approximately 15 ft from the edge of the pump station before it "day lights" above ground. The pipe discharges to a constructed gravel and rip rap lined channel which extends to the edge of Hoopes Spring. The discharge channel provides for conveyance of the water to the stream channel without concern for bank erosion and without disturbance within the stream channel.

5) Hoopes Spring pump station (Adjacent to stream channel, outside wetlands)
Drawing HS-00100-A

The Hoopes Spring pump station includes a below grade wetwell with duplex 3 HP vertical turbine pumps installed above the wetwell and housed within an insulated metal building. The pump station is 12' x 16' which houses the pumps, discharge piping and electrical and instrumentation systems. The pump station is sized to accommodate installation of the future higher flow pumps utilizing the existing piping and building footprint. The current pumping capacity from Hoopes Springs is 200 gpm.

6) SF Sage Creek springs (north) intake structure (Adjacent to stream channel)
Drawings HS-00100-B and HS-00400-C

The SF Sage Creek springs (north) intake structure is a buried perforated 8" PVC pipe installed to the north of SF Sage Creek. The intake structure was installed previously during previous pilot testing. An additional section of intake piping will be installed as a part of this project to increase the capture of high selenium spring water. The new intake piping will be installed adjacent to SF Sage Creek on the north side. It will consist of a 6" PVC pipe buried and lined with gravel. The perforated pipe will connect to 6" HPDE pipe which connects to the 8" HPDE gravity line extending to the SF Sage Creek springs (north) pump station.

7) SF Sage Creek spring (north) gravity line (Adjacent to stream channel)
Drawing HS-00100-B

The SF Sage Creek spring (north) gravity line includes the 8" HDPE line from the existing intake structure and the 6" HDPE line to be installed with this project. The main gravity line is buried on the north side of the SF Sage stream channel is above the wetland levels. The gravity line will convey water to the SF Sage pump station.

8) SF Sage Creek spring (north) overflow line and channel (Adjacent to stream channel)
Drawing HS-00100-B

The overflow line from the SF Sage Creek spring (north) pump station will allow all water delivered to the pump station which is not pumped to the treatment system to be returned to the stream. The overflow line is a 12" HPDE pipe connected to the pump station wetwell. The pipe is located 1' below natural ground and extends approximately 10 ft from the edge of the pump station before it "day lights" above ground. The pipe discharges to a constructed gravel and rip rap lined channel which extends to the edge of SF Sage Creek. The discharge channel provides for conveyance of the water to the stream channel without concern for bank erosion and without disturbance within the stream channel.

9) SF Sage Creek spring (north) pump station (Adjacent to stream channel)
Drawing HS-00100-B

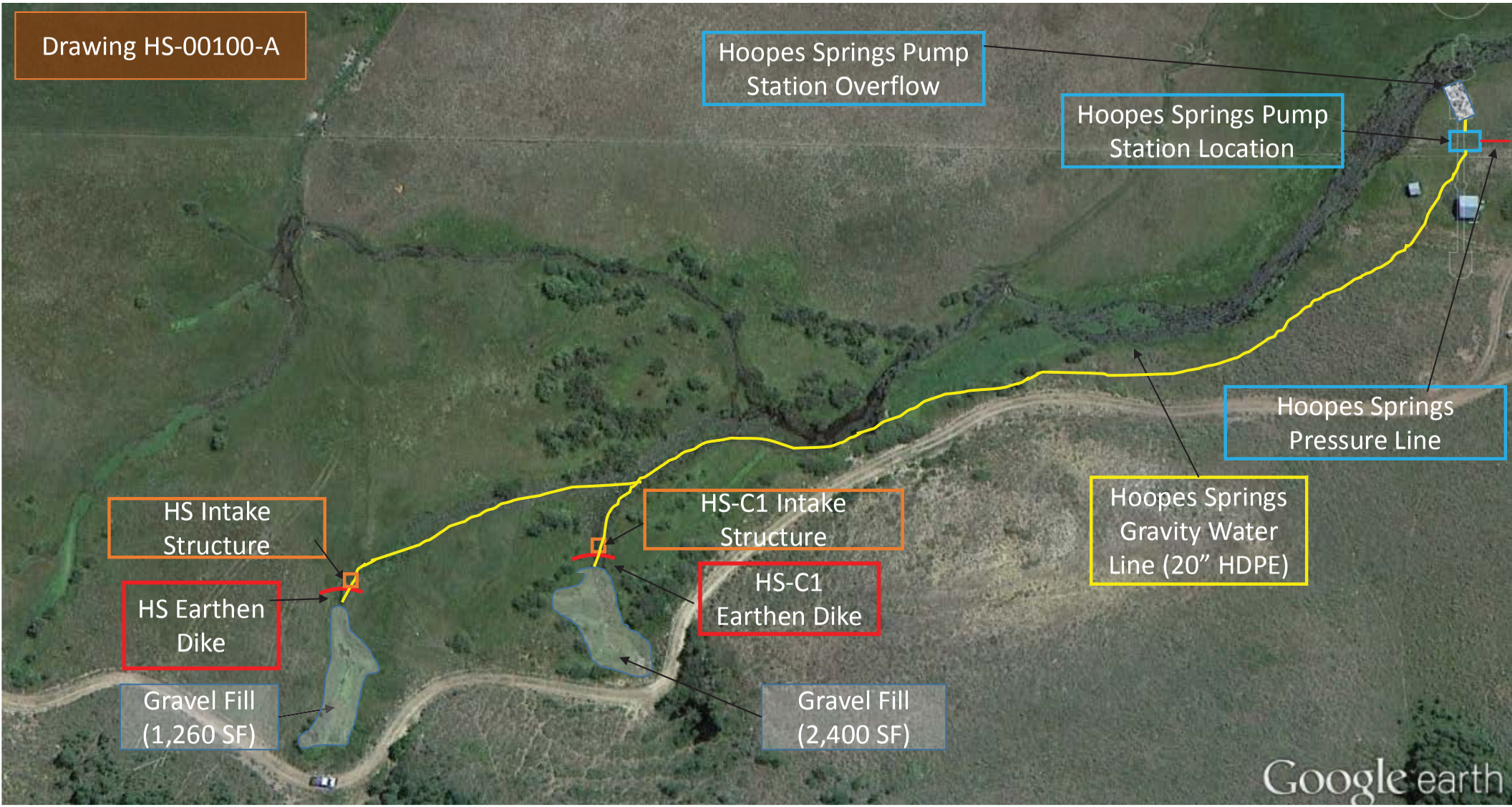
The Hoopes Spring pump station includes a below grade wetwell with duplex 3 HP vertical turbine pumps installed above the wetwell and housed within an insulated metal building. The pump station is 12' x 14' which houses the pumps, discharge piping and electrical and instrumentation systems. The pump station is sized to accommodate installation of the future higher flow pumps utilizing the existing piping and building footprint. The current pumping capacity from SF Sage is 200 gpm.

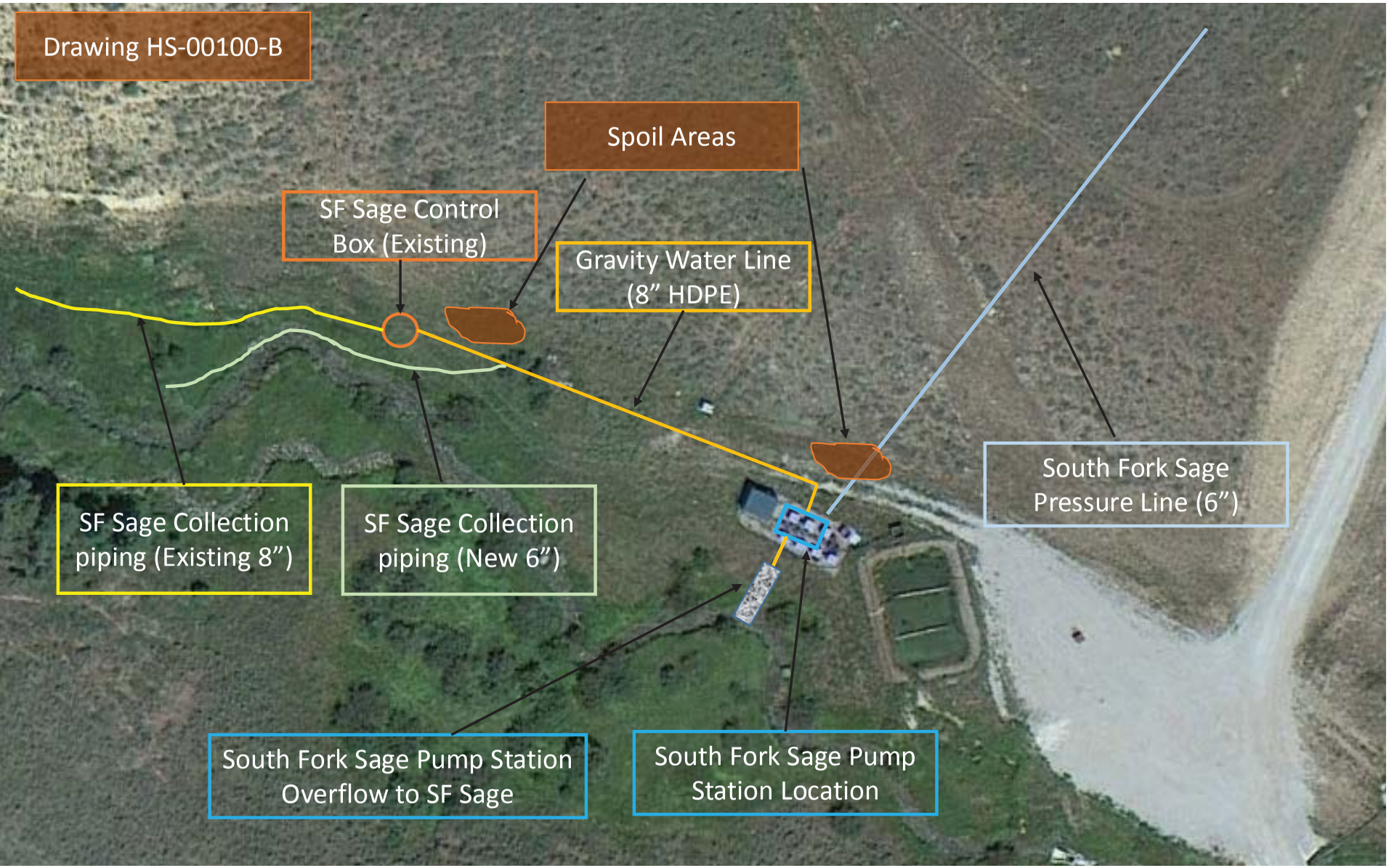
10) Treatability study pilot system building construction
Drawings HS-00100-C

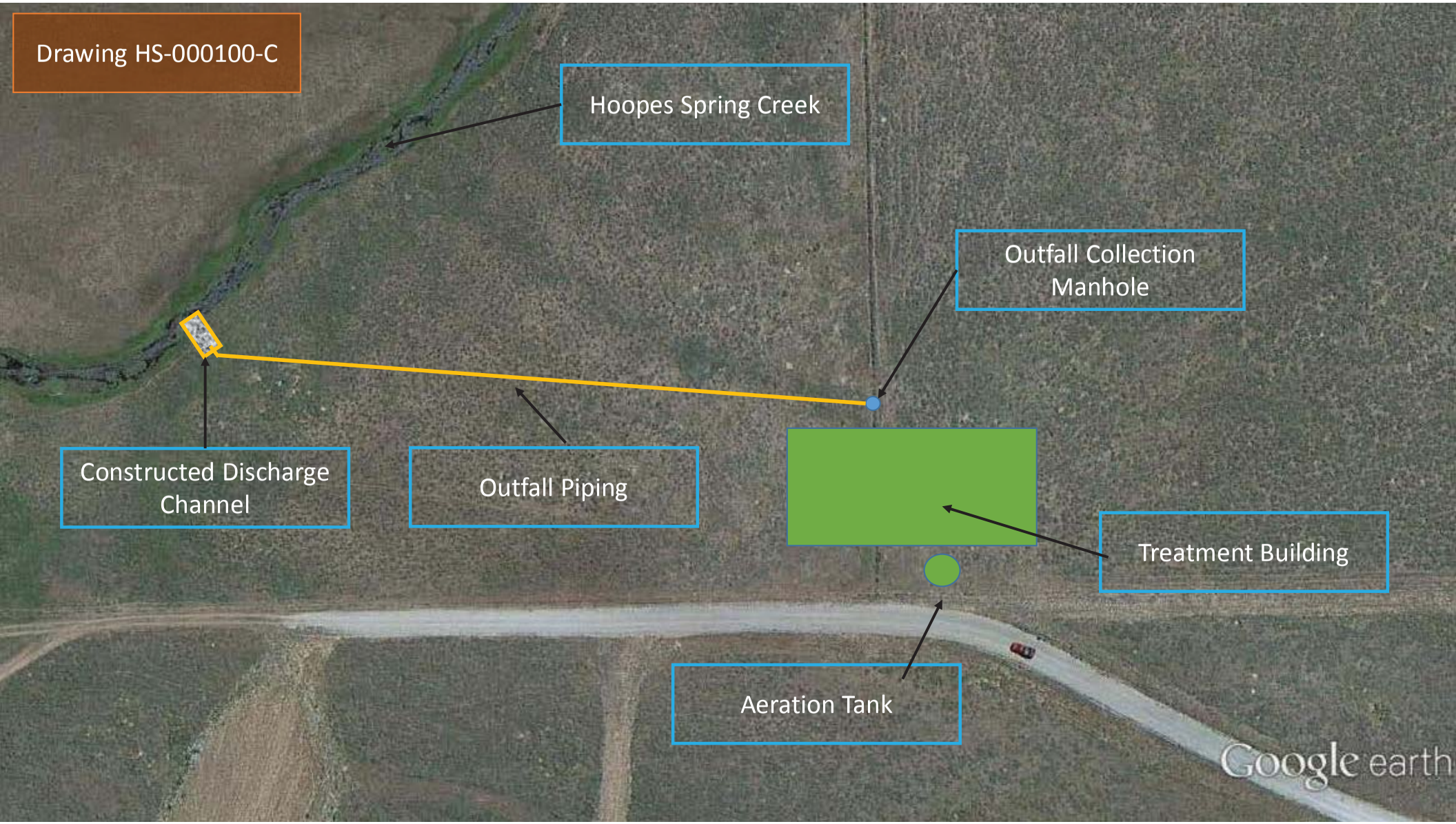
The treatability study pilot system building construction is located outside of all wetlands and is 300ft from Hoopes Spring Creek. The treatment building is 90' x 160' which houses all treatment equipment, chemical tankage, pumping systems, and controls equipment. An exterior aeration tank is provided to oxidize reduced sulfides and residual organics. The pilot treatment system is sized to treat 250 gpm of high selenium spring water and meet project concentration requirements.

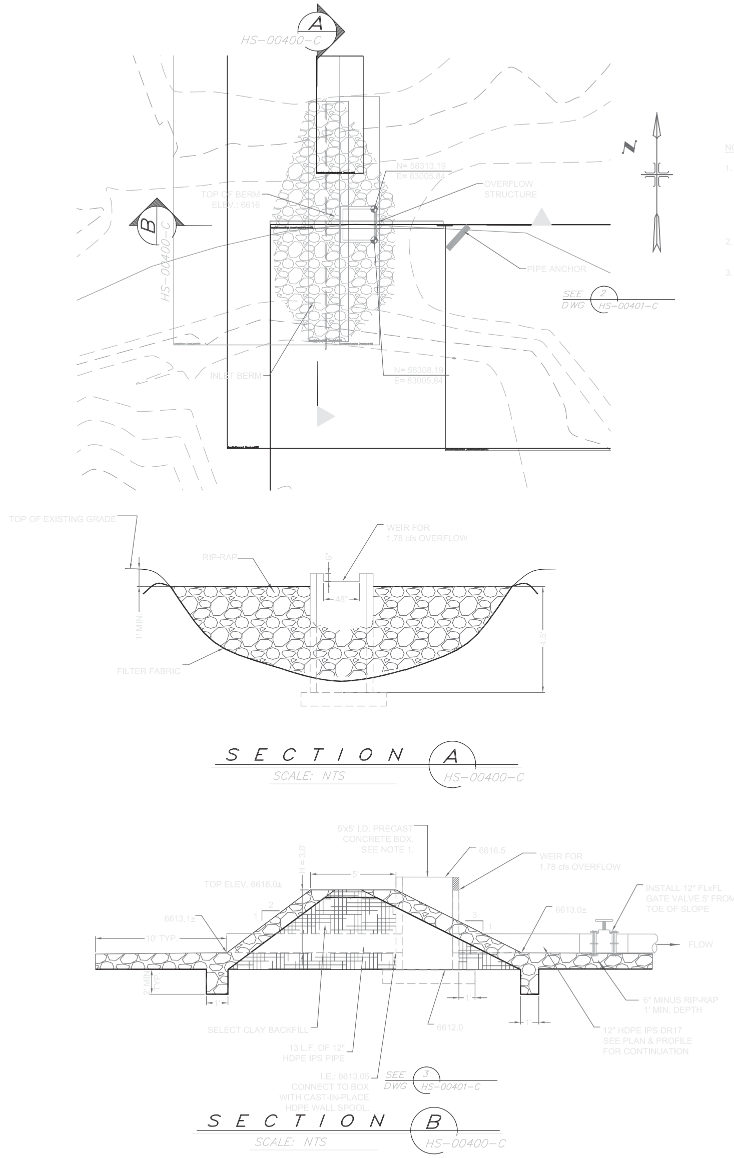
11) Treatability study pilot system outfall
Drawings HS-00100-C and HS-00100-D

The treatability study pilot system outfall consists of a collection manhole located adjacent to the treatment building which collects multiple treated effluent lines from the current treatability study pilot systems and is sized to accommodate additional capacity. The manhole discharges to a 20 inch buried HDPE pipe which is extends 300ft to the edge of Hoopes Spring stream channel. The pipe will daylight ~20ft from the edge of the stream channel and discharges to a gravel and rip rap lined channel which extends to the edge of Hoopes Spring stream channel. A concrete anchor and baffle wall will be installed at the pipe discharge point to dissipate energy from the water before discharge to the gravel channel. The gravel outfall channel allows for minimized disturbance within the stream channel and is sized for current and future flows.


Drawing HS-00100-A
Hoopes Springs Pump Station Overflow
Hoopes Springs Pump Station Location
Hoopes Springs Pressure Line
Hoopes Springs Gravity Water Line (20” HDPE)
HS Intake Structure
HS Earthen Dike
Gravel Fill (1,260 SF)
HS-C1 Intake Structure
HS-C1 Earthen Dike
Gravel Fill (2,400 SF)
Google earth


Drawing HS-00100-B
Spoil Areas
SF Sage Control Box (Existing)
Gravity Water Line (8” HDPE)
South Fork Sage Pressure Line (6”)
SF Sage Collection piping (Existing 8”)
SF Sage Collection piping (New 6”)
South Fork Sage Pump Station Overflow to SF Sage
South Fork Sage Pump Station Location


Drawing HS-000100-C
Hoopes Spring Creek
Outfall Collection Manhole
Constructed Discharge Channel
Outfall Piping
Treatment Building
Aeration Tank
Google earth


HS-00400-C
TOP OF BERM
INLET BERM
OVERFLOW STRUCTURE
PIPE ANCHOR
SEE DWG HS-00401-C
TOP OF EXISTING GRADE
RIP-RAP
WEIR FOR 1.78 cfs OVERFLOW
FILTER FABRIC
SECTION A
SCALE: NTS
HS-00400-C
5'x5' I.D. PRECAST CONCRETE BOX. SEE NOTE 1.
WEIR FOR 1.78 cfs OVERFLOW
INSTALL 12" FLxFL GATE VALVE 5' FROM TOE OF SLOPE
FLOW
10' TYP.
SELECT CLAY BACKFILL
13 L.F. OF 12" HDPE IPS PIPE
6" MINUS RIP-RAP 1' MIN. DEPTH
12" HDPE IPS DR17 SEE PLAN & PROFILE FOR CONTINUATION
CONNECT TO BOX WITH CAST-IN-PLACE HDPE WALL SPOOL
SEE DWG HS-00401-C
SECTION B
SCALE: NTS
HS-00400-C

HSC1 - INLET STRUCTURE

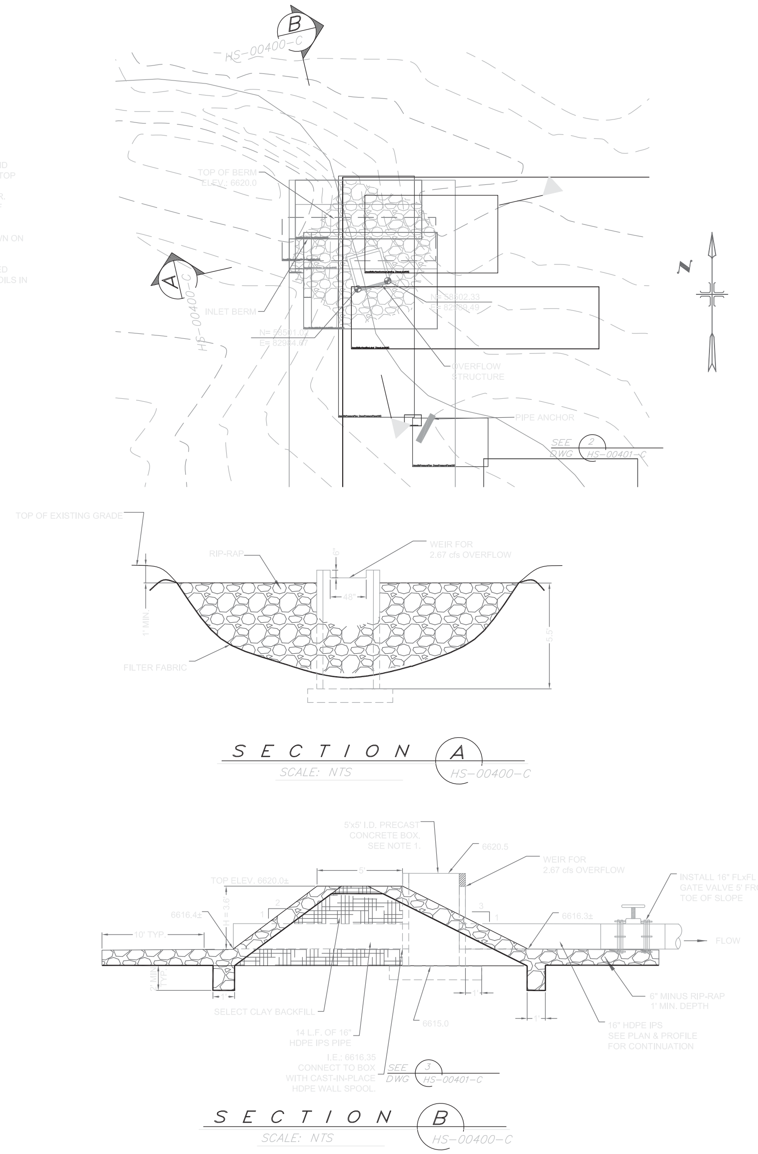
DETAIL 1
SCALE: NTS
HS-00200-C

NOTES:

1. CONCRETE BOX SUPPLIER TO DESIGN WALL THICKNESS AND REBAR PER DIMENSIONAL AND LOADING REQUIREMENTS. TOP OF BOX TO BE OPEN WITH EXPANDED STEEL (3/4" X #10 GALVANIZED STEEL) BOLTED TO THE TOP AT EACH CORNER. STEEL MESH SHALL BE SIZED NOT TO HANG OVER EDGE OF CONCRETE.

2. RIP-RAP SHALL BE 6" MINUS PLACED 12" IN DEPTH AS SHOWN ON DRAWING.

3. SELECTED CLAY BACKFILL SHALL CONSIST OF FINE GRAINED SOILS WITH 50% PASSING THE No. 200 SIEVE. COMPACT SOILS IN 6" LIFTS TO 95% MAX. DRY DENSITY.


HS-00400-C
TOP OF BERM
INLET BERM
OVERFLOW STRUCTURE
PIPE ANCHOR
SEE DWG HS-00401-C
TOP OF EXISTING GRADE
RIP-RAP
WEIR FOR 2.67 cfs OVERFLOW
FILTER FABRIC
SECTION A
SCALE: NTS
HS-00400-C
5'x5' I.D. PRECAST CONCRETE BOX. SEE NOTE 1.
WEIR FOR 2.67 cfs OVERFLOW
INSTALL 16" FLxFL GATE VALVE 5' FROM TOE OF SLOPE
FLOW
10' TYP.
SELECT CLAY BACKFILL
14 L.F. OF 16" HDPE IPS PIPE
6" MINUS RIP-RAP 1' MIN. DEPTH
16" HDPE IPS SEE PLAN & PROFILE FOR CONTINUATION
CONNECT TO BOX WITH CAST-IN-PLACE HDPE WALL SPOOL
SEE DWG HS-00401-C
SECTION B
SCALE: NTS
HS-00400-C

HSC1 - INLET STRUCTURE

DETAIL 2
SCALE: NTS
HS-00201-C

PRELIMINARY
DO NOT USE FOR CONSTRUCTION

C-7

2014
DETAILS
Civil

DRAWN BY: RRB
CHECKED BY: JMA

SCALE: As Noted
REV. A

HS-00400-C

SHEET : 1 OF 3

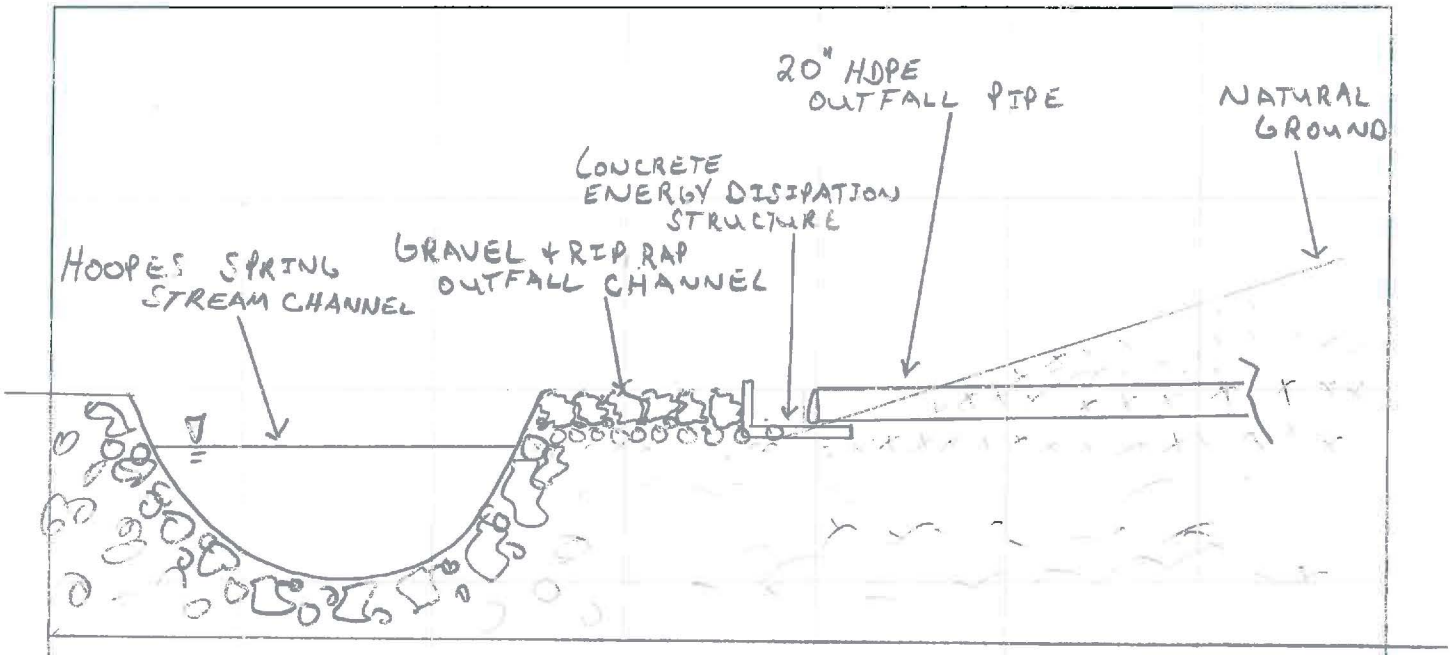
FULL SIZE SHEET 22 x 34
11x17 PRINT IS HALF SCALE

Simplot
Caribou County, ID

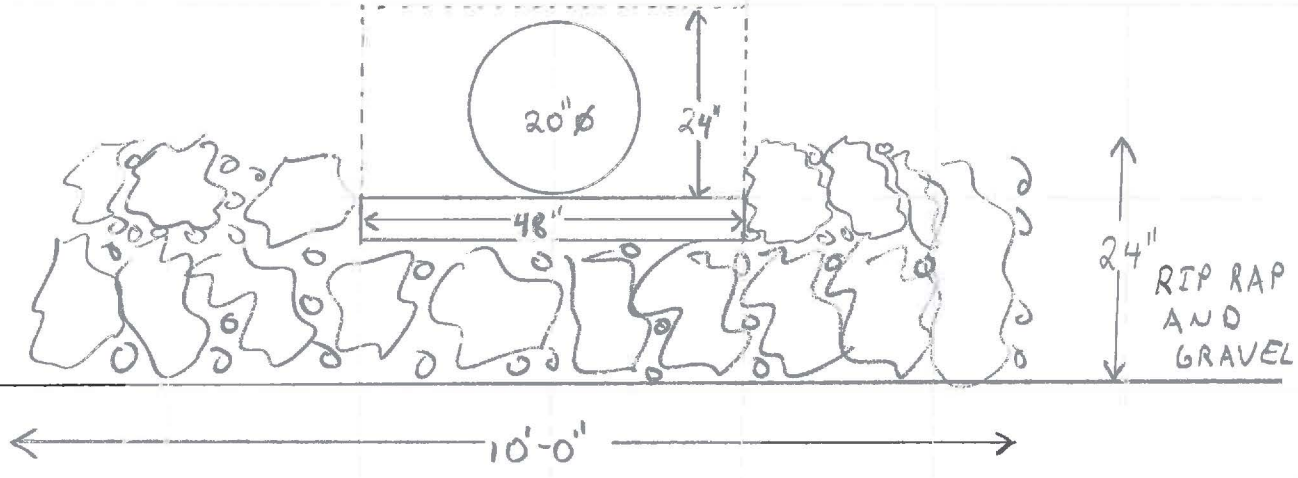
PHARMER ENGINEERING

By_____ Date_____ Client_____ Sheet ____ of ____

Chkd By _____ Description DRAWING HS-000100-D Job No _____



CONCRETE ENERGY DISIPATING STRUCTURE



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